

Abstract

A method for electrolytic production of aluminium metal from an electrolyte (3) including aluminium oxide, by performing electrolysis, with at least one inert anode (1) and at least one cathode (2) thus forming part of an electrowinning cell. The anode evolves oxygen gas and the cathode has aluminium discharged onto it in the electrolysis process, where the oxygen gas enforces an electrolyte flow pattern. The oxygen gas is directed to flow into anode grooves and is drained away from the interpolar room, thereby establishing an electrolyte flow pattern between the electrodes (1) and (2) and between over the anodes (1). The invention also concerns an anode assembly and an electrowinning cell.